

## ABSTRACT OF THE DISCLOSURE

A PVD process and apparatus (120) for depositing a coating (132) from multiple sources (110,111) of different materials. The process and apparatus (120) are particularly intended to deposit a beta-nickel aluminide coating (132) containing one or more elements ~~zirconium, hafnium, yttrium and/or cerium~~, whose vapor pressures are sufficiently lower than NiAl to ~~require a different evaporation rate in order to achieve higher deposition rates and better control of the coating chemistry~~. The PVD process and apparatus (120) entail feeding at least two materials (110,111) into a coating chamber (122) and evaporating ~~melting~~ the materials (110,111) at different rates from ~~to form~~ separate molten pools (114,115) thereof. Articles (130) to be coated are suspended within the coating chamber (122), and transported with a support apparatus (118) relative to the two molten pools (114,115) so as to deposit a coating (132) with a controlled composition that is a mixture of the first and second materials (110,111).